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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/008,675    01/16/98    NAGATA

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EXAMINER
HOPKINS, R

ART UNIT	PAPER NUMBER
1724	

DATE MAILED: 09/07/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/008,675

Applicant(s)

Nagata et al

Examiner

Robert Hopkins

Group Art Unit

1724

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-22 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-22 is/are rejected.
- ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 U.S.C. § 112*

1. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as based on a claim disclosure which is not enabling.

Claim 1 recites a step of "wrapping at least one sheet of vapor impervious film against and around the radially outwardly facing surface of the belt/belt sleeve body", however figure 1 and figure 2 clearly show a mold, wherein the endless body of the belt/belt sleeve is wrapped around the mold. Without the mold, the belt/belt sleeve would be unsupported and hence the film would not be feasibly wrapped around the belt outer surface. Therefore, examiner respectfully requests applicant insert limitations into claim 1 as to a mold for supporting the belt/belt sleeve and vapor impervious film, so that the claim is in concordance with the drawings and specification. Claims 2-13 are dependant on claim 1 and hence are also rejected.

Claim 14 recites "at least one sheet of vapor impervious film against and around the radially outwardly facing surface of the belt/belt sleeve body", however figure 1 and figure 2 clearly show a mold, wherein the endless body of the belt/belt sleeve is wrapped around the mold. Without the mold, the belt/belt sleeve would be unsupported and hence the film would not be feasibly wrapped around the belt outer surface. Therefore, examiner respectfully requests applicant insert limitations into claim 14 as to a mold for supporting the belt/belt sleeve and vapor

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impervious film, so that the claim is in concordance with the drawings and specification. Claims 15-22 are dependant on claim 14 and hence are also rejected.

***Claim Rejections - 35 U.S.C. § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,3-6,10, and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Perkins(3031364).

Perkins teaches a method of treating a power transmission belt/belt sleeve(B) having an endless body with a length extending around an axis and a radially inwardly facing surface and a radially outwardly facing surface, the method comprising the steps of wrapping at least one sheet of vapor-impervious film(20; column 3 lines 50-63) against and around the radially outwardly facing surface of the belt/belt sleeve body, and vulcanizing the belt sleeve with the at least one sheet of vapor impervious film wrapped around the belt/sleeve body. Note that Nylon and Mylar(a polyester film) are both mentioned as film wraps.

Perkins further teaches the step of mounting the belt/belt sleeve on a mandrel(M) and the step of vulcanizing comprises the step of vulcanizing the belt/belt sleeve with the belt/belt sleeve mounted on the mandrel. Perkins further teaches the step of removing the at least one sheet of

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vapor impervious film from the belt/belt sleeve body after vulcanizing the belt/belt sleeve.

Perkins further teaches the step of treating and grinding(see abrasive sander wheel 38) the radially outwardly facing surface of the belt/belt sleeve body after removing the at least one sheet of vapor impervious film(see figure 3).

4. Claim 14,16,17, and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Perkins(3031364).

Perkins teaches a treating system comprising a belt/belt sleeve(B) having an endless body with a length extending around an axis and a radially inwardly facing surface and a radially outwardly facing surface, at least one sheet of vapor impervious film(20) against and extending around the radially outwardly facing surface of the belt/belt sleeve body, and a vulcanizing vessel(column 3 lines 69-70) in which the belt/belt sleeve with the at least one sheet of vapor impervious film thereon resides and in which a vulcanization process can be carried out. Perkins further teaches a mandrel(M) on which the belt/belt sleeve is mounted.

***Claim Rejections - 35 U.S.C. § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins(3031364).

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Perkins discloses all of the limitations of claim 2 but is silent as to wherein the step of wrapping comprises the step of wrapping at least one sheet of vapor impervious film over at least part of each of the axially spaced, axially facing ends of the belt /belt sleeve body. Examiner respectfully submits that it would have been obvious to someone of ordinary skill in the art the time of the invention to extend the vapor impervious film wrapping of Perkins to extend over the edges of belt sleeve so that the entire belt sleeve is surrounded by the film. Examiner respectfully submits that such a substitution is well within the purview of someone of ordinary skill in the art during routine experimentation with the apparatus.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins(3031364).

Perkins discloses all of the limitations of claim 15 but is silent as to wherein the at least one sheet of vapor impervious film extends at least partially over the axially spaced, axially facing ends of the belt/belt sleeve body. Examiner respectfully submits that it would have been obvious to someone of ordinary skill in the art the time of the invention to extend the vapor impervious film wrapping of Perkins to extend over the edges of belt sleeve so that the entire belt sleeve is surrounded by the film. Examiner respectfully submits that such a substitution is well within the purview of someone of ordinary skill in the art during routine experimentation with the apparatus.

8. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins(3031364) taken together with Hamura et al(5192382).

Perkins discloses all of the limitations of claim 7 but is silent as to wherein the step of grinding comprises the step of grinding at least two grooves in the belt/belt sleeve body through

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the radially outwardly facing surface to define at least one V-shaped rib extending along the length of the belt/belt sleeve body. Hamura et al discloses a process wherein after vulcanization of a belt, the belt is rotated on cylindrical drums and contacts a grinding wheel having V shaped grindstones on the surface of the wheel. It would have been obvious to someone of ordinary skill in the art the time of the invention to include a grinding step wherein V-shaped grooves are imparted to the length of a vulcanized belt as disclosed by Hamura et al so that the vulcanized belt of Perkins et al has V-shaped grooves imparted along the length of the belt.

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins(3031364) taken together with Hamura et al(5192382).

Perkins discloses all of the limitations of claim 21 but is silent as to wherein the radially inwardly facing surface of the belt/belt sleeve body has alternating grooves and teeth along the length of the belt/belt sleeve body. Hamura et al discloses a process wherein after vulcanization of a belt, the belt is rotated on cylindrical drums and contacts a grinding wheel having V shaped grindstones on the surface of the wheel. It would have been obvious to someone of ordinary skill in the art the time of the invention to include a grinding step wherein V-shaped grooves are imparted to the length of a vulcanized belt as disclosed by Hamura et al so that the vulcanized belt of Perkins et al has V-shaped grooves imparted along the length of the belt.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Mishima(5073098) discloses a cylindrical jacket placed around the outside of an uncured belt sleeve, equivalent to that mentioned in applicant's background.

*Allowable Subject Matter*

11. Claims 11 and 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

Claim 11 recites a step of applying a sealing material in addition to the vapor impervious film at at least one of the first and second corners prior to vulcanizing the belt/belt sleeve. The limitation is not disclosed in the prior art of record. Claim 12 is dependant on claim 11 and would also be allowable upon incorporation of claim 11 into claim 1.

13. Claims 18-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter:

Claim 18 recites the treating system further comprises a sealing material which is applied over the vapor impervious film at at least one of the first and second corners.. The limitation is



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not disclosed in the prior art of record. Claims 18 and 19 are dependant on claim 18 and would also be allowable upon incorporation of claim 18 into claim 14.

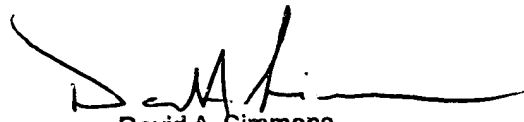
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Hopkins whose telephone number is (703) 308-3913. The examiner can normally be reached on Monday to Friday from 9am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Simmons, can be reached on (703) 308-1972. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Rah

September 1, 1999



David A. Simmons  
Supervisory Patent Examiner  
Technology Center 1700